Product Specification

8-Port 10/100/1000Mbps with 1 SFP shared
Desktop Gigabit Ethernet Switch

GSD-805F

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2010/11/18	Bryant Wu	Initial Release

Author:	Bryant Wu	**Editor:**	Bryant Wu
Reviewed By:	Kent Kang	**Approved By:**	Tom Shih

1. PRODUCT DESCRIPTION

The PLANET GSD-805F provide 8 x 10/100/1000Mbps Ports with 1 SFP port shared and 16Gbps internal switching fabric, the GSD-805F can handle extremely large amounts of data in a secure topology linking to a backbone or high capacity servers, with non-blocking wire-speed performance and metal shape for easily desktop deployment in compact housing or SOHO application.

The GSD-805F has 8K MAC Address table and offers wire-speed packets transfer performance without risk of packet loss. The Gigabit ports with 9K jumbo packet feature can handle large amounts of data transmission in a secure topology linking to a backbone or high-power servers. The high data throughput of the device makes it ideal for most Gigabit environments especially network upgrades to a Gigabit environment.

All RJ-45 copper interfaces support 10/100/1000Mbps Auto-Negotiation for optimal speed detection through RJ-45 Category 5, 5e or 6 cables. GSD-805F is standard for Auto-MDI / MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables. The Flow Control function allows your Gigabit Ethernet Switch supported routers and servers to directly connect to this Switch for fast, reliable data transfer.

With one mini-GBIC 1000Base-SX / LX SFP (Small-Form Factor Pluggable) interfaces, the deployed distance of GSD-805F can be extended from 550 meters (Multi-mode fiber) up to above 10/20/30/40/50/70/120 kilometers (Single-mode fiber) which just provides a high-performance edge device for FTTx solutions. To build a network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb) for ISPs and FTTB (Fiber to the Building) for enterprises, the various distances of SFP (Small-Form Factor Pluggable) are optional for customers.

2. PRODUCT FEATURES

- 8-Port 10/100/1000Mbps ports with 1 SFP Port shared (Shared with port 1)
- SFP slot for easy and flexible fiber distance expansion
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Hardware based 10/100Mbps, Half / Full Duplex and 1000Mbps Full Duplex mode, Flow Control and Auto-negotiation
- IEEE 802.3x Flow Control for Full Duplex operation and Back-pressure for Half Duplex operation
- Integrated address look-up engine, support 8K absolute MAC addresses
- 1Mbit on-chip frame buffer
- 9K Jumbo packet Feature
- Automatic address learning and address aging
- Supports Auto MDI/MDI-X function
- Support CSMA/CD protocol
- Internal power adapter 100-240V AC, 50/60Hz, 0.2A
- FCC, CE class A compliant

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Switch ASIC: Realtek RTL8370M x1

PHY: Realtek RTL8211DN x1

3.2 FUNCTION SPECIFICATION

Product	GSD-805F
Hardware Specification	
10/100/1000Base-T Ports	8 RJ-45 , Auto-MDI/MDI-X
SFP/mini-GBIC Slot	1, Shared with Port 1
Switch Specification	
Switch Processing Scheme	Store-and-Forward
Address Table	8K entries
Share data Buffer	1Mbit on-chip frame buffer
Flow Control	Back pressure for Half Duplex IEEE 802.3x Pause Frame for Full Duplex
Switch fabric	16Gbps
Throughput (packet per second)	11.9Mpps
Network cables	■ 10/100/1000Base-T: Cat. 3, 4, 5, 5e, 6 UTP cable (100 meters, max.) EIA/TIA-568 100-ohm STP (100 meters, max.) ■ 50/125μm or 62.5/125μm multi-mode fiber cable, up to 220/550m. ■ 9/125μm single-mode cable, provides long distance for 10/15/20/30/40/50/60/70/120km (very on fiber transceiver or SFP module)
Standards Conformance	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Fiber Etherent IEEE 802.3x Full-duplex Flow Control

3.3 PHYSICAL SPECIFICATIONS:

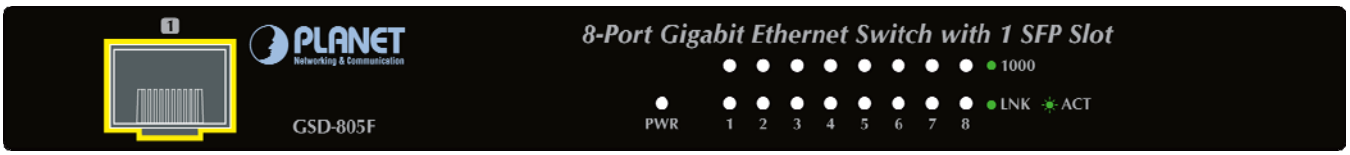
Dimensions:

191 mm x 85.7 mm x 26.3 mm (W x D x H), 1U height

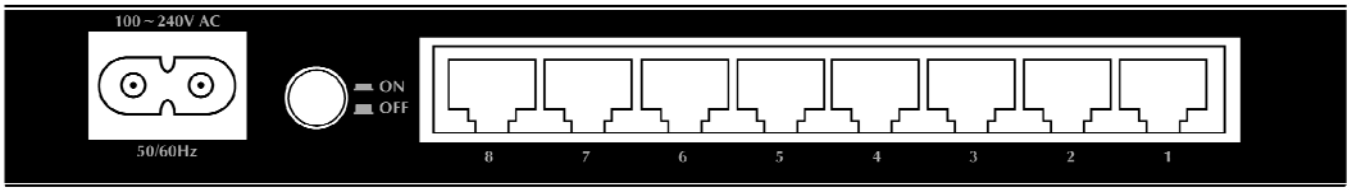
Weight:

440g

Front Panel:



Rear Panel:



LED Definition

■ **System**

LED	Color	Function
PWR	Green	**Light:** Indicate that the Switch has power.

■ **Per 10/100/1000Base-TX RJ-45 Port**

LED	Color	Function
1000	Green	**Light:** Indicate that the Switch is successfully connecting to the network at 1000Mbps. **OFF:** Indicate that the Switch is successfully connecting to the network at 10Mbps or 100Mbps.
LNK/ACT	Green	**Light:** Indicate the link through that port is successfully established. **Blink:** Indicate that the Switch is actively sending or receiving data over that port.

■ **Per 1000Base-X SFP Port (Shared with Port 1)**

LED	Color	Function
LNK/ACT	Green	**Light:** Indicate that the Switch is successfully connecting to the network at 1000Mbps. **Blink:** Indicate that the Switch is actively sending or receiving data over that port.

3.4 ENVIRONMENTAL SPECIFICATION

Operating:

Temperature: 0°C ~ 45 Degree C

Relative Humidity: 5% ~ 95% (non-condensing)

Storage:

Temperature: -40°C ~ 70 Degree C

Relative Humidity: 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATION

Input Voltage: Internal power 100-240V AC, 50/60Hz, 0.2A

Power consumption: 9.2 Watts / 31BTU max.

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 Degree C

3.8 BASIC PACKAGING

- GSD-805F x1
- User's Manual x1
- Power Cord x 1
- Rubber Feet x 4

3.9 PACKING DIMENSION

Dimension
255mm x 207mm x 65 mm (W x D x H)

Weight
0.77kg (Gross Weight)

20pcs in one carton